

1 1. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing call control using data commands provided over a data line,
5 the method comprising the following:

6 a specific act of receiving a call control command from a data line;
7 a specific act of interpreting the call control command;
8 a specific act of determining one or more acts that would need to be accomplished
9 to comply with the call control command; and
10 a specific act of implementing the one or more acts on one or more voice lines or
11 one or more data lines.

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13 2. A method in accordance with Claim 1, further comprising the following:
14 a specific act of scheduling the one or more acts.

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16 3. A method in accordance with Claim 2, wherein the specific act of
17 scheduling the one or more acts comprises the following:

18 a specific act of placing one or more higher priority acts of the one or more acts in a
19 queue for expedited execution; and
20 a specific act of placing one or more lower priority acts of the one or more acts in a
21 database for delayed execution.

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23 4. A method in accordance with Claim 3, further comprising the following:
24 a specific act of executing the one or more higher priority acts; and

1 a specific act of executing the acts in the database after the queue has been emptied.

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3 5. A method in accordance with Claim 1, wherein the call control command is
4 a first call control command, wherein the one or more acts are a first set of one or more
5 acts, the method further comprising the following:

6 a specific act of receiving a second call control command from a voice line;

7 a specific act of interpreting the second call control command;

8 a specific act of determining a second group of one or more acts that would need to
9 be accomplished to comply with the second call control command; and

10 a specific act of implementing the second group of one or more acts.

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12 6. A method in accordance with Claim 1, wherein the specific act of receiving
13 the call control command from a data line comprises the following:

14 receiving the call control command from the data line via a Telephony Application
15 Program Interface.

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1 7. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing call control using data commands provided over a data line,
5 the method comprising the following:

6 a specific act of receiving a call control command from a data line; and
7 a step for processing so as to fulfill the call control command on one or more voice
8 lines or one or more data lines.

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10 8. A method in accordance with Claim 7, wherein the step for processing so as
11 to fulfill the call control command comprises the following:

12 a specific act of interpreting the call control command;
13 a specific act of determining one or more acts that would need to be accomplished
14 to comply with the call control command; and
15 a specific act of implementing the one or more acts on one or more voice lines.

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1 9. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing call
5 control using data commands provided over a data line, the computer program product
6 comprising one or more computer-readable media having stored thereon the following:

7 computer-executable instructions for detecting the receipt of a call control
8 command from a data line;

9 computer-executable instructions for interpreting the call control command;

10 computer-executable instructions for determining one or more acts that would need
11 to be accomplished to comply with the call control command; and

12 computer-executable instructions for implementing the one or more acts on one or
13 more voice lines or one or more data lines.

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15 10. A computer program product in accordance with Claim 9, wherein the
16 computer-readable medium is one or more physical storage media.
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1 11. A call control server configured to recognize and respond to commands
2 issued by the telephonic device to thereby accomplish telephonic tasks, the call control
3 server comprising the following:

4 one or more data lines;

5 one or more voice lines; and

6 means for processing a call control command received on one of the data lines so as
7 to implement the call control command on one or more voice lines or one or more data
8 lines.

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10 12. A call control server in accordance with Claim 11, further comprising the
11 following:

12 a queue for storing higher priority acts received from the command interpreter for
13 more immediate execution; and

14 a database for storing lower priority acts received from the command interpreter for
15 less immediate execution.

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1 13. A call control server configured to recognize and respond to commands
2 issued by the telephonic device to thereby accomplish telephonic tasks, the call control
3 server comprising the following:

4 one or more data lines;

5 one or more voice lines;

6 a command interpreter configured to interpret call control commands received over
7 at least the data lines; and

8 an action scheduler configured to implement one or more acts needed to implement
9 the call control commands on the voice lines or the data lines.

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11 14. A call control server in accordance with Claim 13, wherein the command
12 interpreter is configured to prioritize the one or more acts.

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14 15. A call control server in accordance with Claim 14, further comprising the
15 following:

16 a queue for storing higher priority acts received from the command interpreter for
17 more immediate execution.

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19 16. A call control server in accordance with Claim 14, further comprising the
20 following:

21 a database for storing lower priority acts received from the command interpreter for
22 less immediate execution.

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1 17. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing a human to use a set of commands that are more intuitive to
5 the human in order to control the call control server, even though the call control server
6 does not directly recognize the intuitive set of commands, the method comprising the
7 following:

8 a specific act of receiving a function call issued by a set of one or more program
9 modules, wherein the function call represents a request for the call control server to
10 emulate a telephonic scenario, the request being in a form that is not recognized by the call
11 control server; and

12 a specific act of translating the request into a form that is recognized by the call
13 control server.

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15 18. A method in accordance with Claim 17, wherein the method is implemented
16 on the same machine as the call control server, the method further comprising the
17 following:

18 a specific act of passing the translated request to the call control server.

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20 19. A method in accordance with Claim 17, wherein the method is implemented
21 on a different machine as the call control server, the method further comprising the
22 following:

23 a specific act of transmitting the translated request to the call control server.
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1 20. A method in accordance with Claim 17, wherein the specific act of
2 translating the request into a form that is recognized by the call control server comprises
3 the following:

4 a specific act of translating the request into a sequence represented by the
5 characters of a telephonic keypad including the characters 0 through 9, # and *.

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7 21. A method in accordance with Claim 17, wherein the specific act of
8 translating the request into a form that is recognized by the call control server comprises
9 the following:

10 a specific act of translating the request into a DTMF sequence.

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12 22. A method in accordance with Claim 17, wherein the function call includes a
13 handle that identified a connection with the call control server.

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15 23. A method in accordance with Claim 17, wherein the function call comprises
16 a request to stay connected for a predetermined period of time.

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18 24. A method in accordance with Claim 23, wherein the request to stay connect
19 for a predetermined period of time comprises the following:

20 a first field representing the time that the call control server should remain
21 connected before hanging up.

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1 25. A method in accordance with Claim 24, wherein the request is generated
2 from source code that takes the form `BOOL CCCStayConnected(HCALL hcall,`
3 `CCCParam &cccParam).`

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5 26. A method in accordance with Claim 17, wherein the function call comprises
6 a request to have the call control server call back.

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8 27. A method in accordance with Claim 26, wherein the request to have the call
9 control server call back comprises the following:

10 a first field representing a telephone number to call back;

11 a second field representing an interval between call backs; and

12 a third field representing a period of time over which to call back.

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14 28. A method in accordance with Claim 27, wherein the request is generated
15 from source code that takes the form `BOOL CCCOrderCallBack(HCALL hcall,`
16 `CCCParam &cccParam).`

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18 29. A method in accordance with Claim 17, wherein the function call comprises
19 a request to echo data.

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21 30. A method in accordance with Claim 29, wherein the request to echo data
22 comprises the following:

23 a first field representing the data to echo; and

24 a second field representing the number of times to echo.

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31. A method in accordance with Claim 30, wherein the request is generated from source code that takes the form `BOOL CCCEcho(HCALL hcall, CCCParam &cccParam)`.

32. A method in accordance with Claim 17, wherein the function call comprises a request to download a file.

33. A method in accordance with Claim 32, wherein the request to download a file comprises the following:

a first field representing the name of the file to be downloaded.

34. A method in accordance with Claim 33, wherein the request takes the form `BOOL CCCDownload(HCALL hcall, LPCTSTR & szFileName)`.

35. A method in accordance with Claim 17, wherein the function call comprises a request to add a client telephonic device to a call list of the call control server.

36. A method in accordance with Claim 35, wherein the request to add a client telephonic device to a call list of the call control server comprises the following:

a first field representing a telephone number of the client telephonic device;

a second field representing how long the call control server should keep the telephone number; and

a third field representing actions that the client telephonic device is interested in.

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37. A method in accordance with Claim 36, wherein the request takes the form
BOOL CCCAddClient(HCALL hcall, CCCParam &cccParam, ActionInterest actMask).

38. A method in accordance with Claim 17, wherein the function call is
generated by a user-entered data in a command line.

39. A method in accordance with Claim 38, wherein the function call is for a
teleconference to be initiated.

40. A method in accordance with Claim 39, wherein the user-entered data is of
the form CCSMakeConf followed by an identification of two lines that are to be involved
in the teleconference.

41. A method in accordance with Claim 38, wherein the function call is for the
call control server to call back.

42. A method in accordance with Claim 41, wherein the user-entered data is of
the form CCSCallBack followed by an identification of a telephone number to call back.

1 43. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing a human to use a set of commands that are more intuitive to
5 the human in order to control the call control server, even though the call control server
6 does not directly recognize the intuitive set of commands, method comprising the
7 following:

8 a specific act of generating a function call that represents a request for the call
9 control server to emulate a telephonic scenario, the request being in a form that is not
10 recognized by the call control server; and

11 a specific act of passing the function call to a set of one or more program modules
12 for translation of the request into a form that is recognized by the call control server.
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14 44. A method in accordance with Claim 43, wherein the function call includes a
15 handle that identified a connection with the call control server.
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17 45. A method in accordance with Claim 43, wherein the function call comprises
18 a request to stay connected for a predetermined period of time.
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20 46. A method in accordance with Claim 45, wherein the request to stay connect
21 for a predetermined period of time comprises the following:

22 a first field representing the time that the call control server should remain
23 connected before hanging up.
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1 47. A method in accordance with Claim 46, wherein the request is generated
2 from source code that takes the form `BOOL CCCStayConnected(HCALL hcall,`
3 `CCCParam &cccParam).`

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5 48. A method in accordance with Claim 43, wherein the function call comprises
6 a request to have the call control server call back.

7
8 49. A method in accordance with Claim 48, wherein the request to have the call
9 control server call back comprises the following:

- 10 a first field representing a telephone number to call back;
11 a second field representing an interval between call backs; and
12 a third field representing a period of time over which to call back.

13
14 50. A method in accordance with Claim 49, wherein the request is generated
15 from source code that takes the form `BOOL CCCOrderCallBack(HCALL hcall,`
16 `CCCParam &cccParam).`

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18 51. A method in accordance with Claim 43, wherein the function call comprises
19 a request to echo data.

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21 52. A method in accordance with Claim 51, wherein the request to echo data
22 comprises the following:

- 23 a first field representing the data to echo; and
24 a second field representing the number of times to echo.

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53. A method in accordance with Claim 52, wherein the request is generated from source code that takes the form `BOOL CCCEcho(HCALL hcall, CCCParam &cccParam)`.

54. A method in accordance with Claim 43, wherein the function call comprises a request to download a file.

55. A method in accordance with Claim 54, wherein the request to download a file comprises the following:

a first field representing the name of the file to be downloaded.

56. A method in accordance with Claim 55, wherein the request takes the form `BOOL CCCDownload(HCALL hcall, LPCTSTR & szFileName)`.

57. A method in accordance with Claim 43, wherein the function call comprises a request to add a client telephonic device to a call list of the call control server.

58. A method in accordance with Claim 57, wherein the request to add a client telephonic device to a call list of the call control server comprises the following:

a first field representing a telephone number of the client telephonic device;

a second field representing how long the call control server should keep the telephone number; and

a third field representing actions that the client telephonic device is interested in.

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59. A method in accordance with Claim 58, wherein the request takes the form
BOOL CCCAddClient(HCALL hcall, CCCParam &cccParam, ActionInterest actMask).

1 60. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing a
5 human to use a set of commands that are more intuitive to the human in order to control
6 the call control server, even though the call control server does not directly recognize the
7 intuitive set of commands, the computer program product comprising one or more
8 computer-readable media having stored thereon the following:

9 computer-executable instructions for receiving a function call issued by a set of one
10 or more program modules, wherein the function call represents a request for the call
11 control server to emulate a telephonic scenario, the request being in a form that is not
12 recognized by the call control server; and

13 computer-executable instructions for translating the request into a form that is
14 recognized by the call control server.
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16 61. A computer program product in accordance with Claim 60, wherein the
17 computer-readable medium is one or more physical storage media.

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19 62. A computer program product in accordance with Claim 60, wherein the
20 computer-readable medium further has stored thereon the following:

21 computer-executable instructions for causing the translated request to be accessible
22 to the call control server.
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1 63. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing a
5 human to use a set of commands that are more intuitive to the human in order to control
6 the call control server, even though the call control server does not directly recognize the
7 intuitive set of commands, the computer program product comprising one or more
8 computer-readable media having stored thereon the following:

9 computer-executable instructions for generating a function call that represents a
10 request for the call control server to emulate a telephonic scenario, the request being in a
11 form that is not recognized by the call control server; and

12 computer-executable instructions for passing the function call to a set of one or
13 more program modules for translation of the request into a form that is recognized by the
14 call control server.

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16 64. A computer program product in accordance with Claim 63, wherein the
17 computer-readable medium is one or more physical storage media.